

REMARKS

Claims 3 and 11 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Yoon (USPN 6,005,542). Applicant traverses the rejection because Yoon does not disclose performing both a pre-scanning and a main scanning for each horizontal line.

Yoon is directed to a method for driving a thin film transistor Liquid crystal display (LCD) device using varied gate low levels. The examiner cites Figs. 8 and 10 of Yoon as showing the pre-scanning. Fig. 8 shows a first gate pulse in a positive field (a) and a second gate pulse in a negative field (b). However, the first and second gate pulses do not equate to a pre-scanning and main scanning in the present invention. Fig. 8 of Yoon shows that a value of a signal V_{LC} in the positive field (a) has a value that is significantly greater than a value of the signal V_{LC} in the negative field (b). Fig 10 of Yoon shows only gate signal waveforms, which indicate the relationship between gate pulses of a given gate line and those of the previous gate line and the subsequent gate line of a display. However, Fig. 10 fails to show any pre-scanning period.

In contrast, the present application teaches that a value of a data signal 26 during the main scanning period A is approximately equal to a value of the data signal during the majority of the pre-scanning period B as shown in, for example, Fig. 21. This allows a pixel voltage, during the pre-scanning period, to assume a value close to a value it will assume in the main scanning period. Thus, because Yoon fails to disclose performing both a pre-scanning and a main scanning as recited in claims 3 and 11, withdrawal of the rejection is respectfully requested.

Claims 1, 2, 4, and 12 stand rejected under 35 U.S.C. § 102(e) as being anticipated by Matsubara et al. (USPN 6,549,187). Applicant traverses the rejection because Matsubara fails to disclose using a data signal whose polarity is inverted at the beginning and end of each horizontal scanning period.

Matsubara teaches that voltage is applied to the pixels of a liquid crystal display such that the polarity is inverted every two gate lines in the vertical direction. That is Matsubara discloses inverting the polarity of the source potential when an n^{th} gate line is selected, but not inverting the source potential when an $(n+1)^{\text{th}}$ gate line is selected.

In contrast, claims 1 and 4 of the present application require using a data signal whose polarity is inverted at the beginning and end of each horizontal scanning period. The present specification defines one horizontal scanning period as the period in which one gate line is scanned. Thus, Matsubara merely discloses inverting the source potential at every second horizontal scanning period, and not every horizontal scanning period, as recited in claims 1 and 4. Accordingly, applicants respectfully request withdrawal of the rejection of independent claims 1 and 4, and their respective dependent claims.

For all the foregoing reasons, applicant submits that this application is in condition for allowance, which is respectfully requested. The examiner is invited to contact the undersigned attorney if an interview would expedite prosecution.

If a Petition under 37 C.F.R. §1.136(a) for an extension of time for response is required to make the attached response timely, it is hereby petitioned under 37 C.F.R. §1.136(a) for an extension of time for response in the above-identified application for the

period required to make the attached response timely. The Commissioner is hereby authorized to charge fees which may be required to this application under 37 C.F.R. §§1.16-1.17, or credit any overpayment, to Deposit Account No. 07-2069.

Respectfully submitted,

GREER, BURNS & CRAIN, LTD.

By



Kevin T. Bastuba
Registration No. 59,905

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300 South Wacker Drive
Suite 2500
Chicago, Illinois 60606
Telephone: 312.360.0080
Facsimile: 312.360.9315

Customer No. 24978